

IN THE CLAIMS

The pending claims are as follows:

22. (Previously Presented) A recording arrangement for recording an information signal in tracks on a record carrier, the recording arrangement comprising:

an input terminal for receiving the information signal;

5           channel encoding means for channel encoding the information signal into a channel signal, the channel signal including subsequent signal blocks having a predetermined fixed length, each signal block comprising a first block section having a synchronization signal, and a second block section having a number  
10 of channel bytes; and

writing means for writing the channel signal in the tracks on the record carrier,

wherein the information signal is in a form of an MPEG information signal in accordance with an MPEG format, the MPEG  
15 information signal comprising subsequent transport packages having a predetermined fixed length,

and wherein:

the channel encoding means stores information included in  
x transport packets of the MPEG information signal in the second  
20 block sections of a first group of y first signal blocks of said signal blocks of the channel signal so as to enable a normal play mode using video information stored in said first group of y first signal blocks during a normal play reproduction mode; and

the channel encoding means further receives a trick mode  
25 video signal and stores said trick mode video signal in second  
block sections of a second group of z second signal blocks of said  
signal blocks of the channel signal so as to enable a trick play  
mode using the video information stored in said second signal  
blocks,  
30 wherein the second block sections of at least one signal  
block in each first and second group of first and second signal  
blocks, respectively, comprise a third block section for storing  
identification information indicating whether the group comprises  
the first signal blocks or second signal blocks,  
35 and wherein x, y and z are integer constants in which  $x \geq 1$ ,  
 $y \geq 1$  and  $z \geq 1$ .

23. (Previously Presented) The recording arrangement as claimed in  
claim 22, wherein the second block sections of the signal blocks  
comprise a third block section for storing sequence number  
information relating to a sequence number of the signal block.

24. (Previously Presented) The recording arrangement as claimed in  
claim 22, wherein the second block sections of all signal blocks in  
each first and second group of first and second signal blocks  
respectively comprise a third block section for storing  
5 identification information indicating whether the group comprises  
first signal blocks or second signal blocks.

25. (Previously Presented) The recording arrangement as claimed in claim 24, wherein the second block sections of a group of  $y$  signal blocks each comprise a third block section for storing sequence number information relating to a transport packet sequence number corresponding to the transport packet of which information is stored in said signal block.

26. (Previously Presented) The recording arrangement as claimed in claim 22, wherein the recording arrangement further comprises:

detection means for detecting the moment of receipt of the transport packets, and for generating timing information for each transport packet received,

and wherein the second block sections of at least those signal blocks in a group of  $y$  signal blocks that comprise the start portion of a transport packet comprise a third block section for storing the timing information for said transport packet having its start portion stored in the second block section of the signal block.

27. (Previously Presented) The recording arrangement as claimed in claim 26, wherein the second block sections of a group of  $y$  signal blocks each comprise a third block section for storing the timing information corresponding to the transport packet which has information stored in the second block section of said signal block.

28. (Previously Presented) The recording arrangement as claimed in claim 22, wherein  $y > x$ .

29. (Previously Presented) A computer-readable medium comprising a record carrier having an information signal recorded on it in tracks on said record carrier, the signal recorded in the tracks being in a form of a channel encoded information signal, the channel encoded information signal comprising subsequent signal blocks having a predetermined fixed length, each signal block comprising a first block section having a synchronization signal, and a second block section having a number of channel bytes,

wherein the information signal is an MPEG information signal in accordance with an MPEG format, the MPEG information signal comprising subsequent transport packets having a predetermined fixed length, information included in  $x$  transport packets of the MPEG information signal being included in the second block sections of a first group of  $y$  first signal blocks of the channel encoded information signal, so as to enable a normal play mode using the video information stored in said first group of  $y$  first signal blocks during a normal play reproduction mode,

wherein the information signal comprises a second group of  $z$  second signal blocks in which a trick mode video signal is stored so as to enable a trick play mode using the video information stored in said second group of  $z$  second signal blocks,

and wherein indication information, indicating whether a group comprises first signal blocks or second signal blocks, is

25 stored in the third block sections of at least one signal block of  
the first and second groups and wherein  $x$ ,  $y$  and  $z$  are integer  
constants in which  $x \geq 1$ ,  $y \geq 1$  and  $z \geq 1$ .

30. (Previously Presented) The computer-readable medium as claimed  
in claim 29, wherein sequence number information relating to the  
sequence number of the signal blocks is stored in the third block  
sections of the signal blocks.

31. (Previously Presented) The computer-readable medium as claimed  
in claim 29, wherein the third block section of the second block  
sections of at least those signal blocks in a group of  $y$  first  
signal blocks that comprises the start portion of a transport  
5 packet, comprise information relating to a transport packet  
sequence number corresponding to the transport packet having its  
start portion stored in the second block section of the signal  
block.

32. (Previously Presented) The computer-readable medium as claimed  
in claim 29, wherein the third block section of the second block  
sections of at least those signal blocks in a group of  $y$  first  
signal blocks that comprises the start portion of a transport  
5 packet, comprise timing information for said transport packet  
having its start portion stored in the second block section of the  
signal block.

33. (Previously Presented) A reproducing arrangement for reproducing an information signal that has been recorded in the form of a channel signal in tracks on a record carrier, the reproducing arrangement comprising:

5           reading means for reading the channel signal from a track on the record carrier, the channel signal comprising subsequent signal blocks having a predetermined fixed length, each signal block comprising a first block section having a synchronization signal and a second block section having a number of channel bytes;

10           channel decoding means for channel decoding the channel signal into the information signal; and

            an output terminal for applying the information signal, wherein the reproducing arrangement is adapted to reproduce an MPEG information signal in accordance with an MPEG  
15           format from the record carrier, the MPEG information signal comprising subsequent transport packets having a predetermined fixed length,

            wherein information contained in x transport packets of the MPEG information signal is stored in the second block sections  
20           of a first group of y first signal blocks of the channel signal enabling a normal play mode using the video information stored in said first group of y first signal blocks during a normal play reproduction mode, a trick mode video signal being stored in a second group of z second block sections of second signal blocks of  
25           said signal blocks of the channel signal enabling a trick play mode using the video information stored in said second group of second

signal blocks ,where  $x$  ,  $y$  and  $z$  are integer constants in which  
 $x \geq 1$ ,  $y \geq 1$  and  $z \geq 1$ ,

wherein the second block sections of at least one first  
30 and second signal block in the first and second group each comprise  
a third block section for storing indication information indicating  
whether the group comprises first signal blocks or second signal  
blocks,

and wherein the reproducing arrangement further comprises:

35 first retrieving means for retrieving in said normal play  
mode, the video information of the  $x$  transport packets of the MPEG  
information signal from the first group of  $y$  first signal blocks,  
and for retrieving, in said trick play mode, the trick mode video  
signal from the second group of  $z$  second signal blocks, in response  
40 to a first or a second control signal, and

second retrieving means for retrieving the indication  
information indicating whether the group comprises first signal  
blocks or second signal blocks from the third block sections of the  
at least one signal block in the first and second groups,  
45 respectively, the second retrieving means generating said first and  
second control signals in response thereto.

34. (Previously Presented) The reproducing arrangement as claimed  
in claim 33,

wherein the second block sections of the signal blocks  
comprise a third block section for storing sequence number  
5 information relating to the sequence number of the signal block,

and wherein the second retrieving means retrieves the sequence number information from the third block sections of the signal blocks in said tracks.

35. (Previously Presented) The reproducing arrangement as claimed in claim 33,

wherein the second block sections of at least those signal blocks in a group of  $y$  signal blocks that comprises the start portion of a transport packet, comprise a third block section for storing sequence number information relating to a transport packet sequence number corresponding to the transport packet having its start portion stored in the second block section of the signal block,

and wherein the second retrieving means retrieves the sequence number information relating to the transport packet sequence number from a third block section of a signal block in the group of  $y$  signal blocks.

36. (Previously Presented) The reproducing arrangement as claimed in claim 33,

wherein the second block sections of at least those signal blocks in a group of  $y$  signal blocks that comprises the start portion of a transport packet, comprise a third block section for storing timing information for said transport packet having its start portion stored in the second block section of the signal block,



and wherein the second retrieving means retrieves the  
10 timing information from a third block section of a signal block in  
the group of y signal blocks.

37. (Previously Presented) The reproducing arrangement as claimed  
in claim 33, wherein  $y > x$ .

38. (Previously Presented) A method for recording an information  
signal in tracks on a recording carrier, said method comprising the  
steps:

receiving the information signal;  
5 channel encoding the information signal into a channel  
signal, the channel signal comprising subsequent signal blocks  
having a predetermined fixed length, each signal block comprising a  
first block section having a synchronization signal and a second  
block section having a number of channel bytes; and  
10 writing the channel signal in the tracks on the record  
carrier,

wherein the information signal is in the form of an MPEG  
information signal in accordance with an MPEG format on the record  
carrier, the MPEG information signal comprising subsequent  
15 transport packets having a predetermined fixed length,  
and wherein the channel encoding step comprises the sub-  
steps:

storing information included in x transport packets of the  
MPEG information signal in the second block sections of a first

20 group of y first signal blocks of said signal blocks of the channel  
signal so as to enable a normal play mode using video information  
stored in said first group of y first signal blocks during a normal  
play reproduction mode;  
receiving a trick mode video signal;  
25 storing said trick mode video signal in second block  
sections of a second group of z second signal blocks of said signal  
locks of the channel signal so as to enable a trick play mode using  
the video information stored in said second signal blocks; and  
storing identification information in the second block  
30 sections of at least one signal block in each first and second  
group of first and second signal blocks, respectively, indicating  
whether the group comprises the first signal blocks or second  
signal blocks,  
where x , y and z are integer constants in which  $x \geq 1$ ,  $y \geq 1$  and  $z \geq 1$ .